

IN THE CLAIMS:

Please amend claims 1 and 18 to read as listed below:

1. (Presently amended) ~~Process~~ A process for preparing a composition of a vinylaromatic polymer matrix surrounding rubber nodules, comprising ~~the a~~ step of polymerizing at least one vinylaromatic monomer in the presence of a rubber, a stable free radical which is not introduced into the polymerization mixture in a form linked to a rubber, and a polymerization initiator with a grafting character suitable for said composition wherein said polymerization involves at least one phase inversion,

wherein said composition is such that in a cross-section of the polymer matrix surrounded rubber nodules at least 90% of the total area occupied by the nodules corresponds to capsules having a diameter ranging from 0.1 to 1.0 μm , or else

wherein said composition is such that it comprises multi-occlusion nodules and is such that in one of its sections

20 to 60% of the total area occupied by the particles corresponds to particles having a diameter ranging from 0.1 to 1 μm ,

5 to 20% of the total area occupied by the particles corresponds to particles having a diameter ranging from 1 to 1.6 μm , and

20 to 75% of the total area occupied by the particles corresponds to particles having a diameter of greater than 1.6 μm ,

said step being such that:

-if (SFR) represents the number of moles of stable free radical in the polymerization mixture,

-if F_{SFR} represents the functionality of the stable free radical, i.e. the number of sites on the same molecule of stable free radical having the stable free radical state,

-if (INIT) represents the number of moles of polymerization initiator in the polymerization mixture before phase inversion, and

-if F_{INIT} represents the functionality of the initiator introduced before phase inversion, i.e. the number of sites having the free radical state that each molecule of initiator is capable of generating, then:

$$0.05 < \frac{F_{\text{SFR}} \times (\text{SFR})}{F_{\text{INIT}} \times (\text{INIT})} < 1.$$

18. (Presently Amended) Process according to claim 1, characterized in that the composition is such that, in one of its cross-sections, at least 90% of the total area occupied by the particles corresponds to capsules having a diameter **ranging from 0.1 to 1 μm** .